L 20380-66
ACC NR: AP6006546

an epoxy-polyesteracrylate binder 11EDSM. Prior to compression, the glass fibers were treated with a polyvinylacetate emulsion and were dried for 2 hours at 120C. The mechanical properties of the VP-1 plastic on the basis of the 11EDSM binder are compared with the properties of plastics obtained on the basis of polyester-maleic (DN-1) and polyesteracrylic (911MS and 712-9M) binders. It is concluded that the synthesized fiber-glass plastic VP-1 is suitable for construction and for electrochemical purposes up to a working temperature of 200C. Orig. art. has: 6 tables.

SUB CODE: 11/ SUBM DATE: none

Card 2/2 vmb

L 03030-67 EWP(j)/EWT(m)/T IJP(c) RM/WW

ACC NR: AP6023068 (A) SOURCE CODE: UR/0191/66/000/004/0047/0050

AUTHOR: Kravchenko, L. I.; Zherdev, Yu. V.

ORG: none

TITLE: Dependence of the stability of glass-fiber plastics on their microstructure

SOURCE: Plasticheskiye massy, no. 4, 1966, 47-50

TOPIC TAGS: fiber glass, silicate glass, porosity

ABSTRACT: A study was made of plastics of nonoriented glass fibers prepared from alumino-silicate or alkaline glasses with PN-1, DGM, MDF-2 and TMGF-11 binders. The microstructure of the glass-fiber plastics was determined microscopically. Alumino-silicate glass-fiber plastics had a lower porosity, were less hygroscopic, and more stable than their alkaline analogs. A removal of absorbed water by compression molding and high temperature destroyed the microstructure of alkaline glass-fiber. The flexural strength of the plastics studied changed with the increasing force of compression from 0.5 to 10 kg/cm^2. It had a maximum at 3-5 kg/cm^2 compression. Glass-fiber plastic obtained in an autoclave in vacuo or under pressure had a lower porosity and higher flexural strength than plastics obtained by a conventional compression molding. Orig. art. has: 5 fig. and 2 tables.

SUB CODE: 20,11/ SUBM DATE: none/ ORIG REF: 007/ OTH REF: 003

1/1 UDC: 678.744.5.066 : 677.521/: 678.01 : 539.4

L 31921-66 EWT(m)/EWP(j)/T IJP(c) WW/DJ/RM

ACC NR: AP6007967 (A) SOURCE CODE: UR/0191/66/000/003/0028/0032

AUTHOR: Kravchenko, L. I.; Lesnov, N. S.; Avrasin, Ya. D.

ORG: none

TITLE: Fiberglass plastic obtained from polyester epoxy binder by the contact method at normal temperature

SOURCE: Plasticheskiye massy, no. 3, 1966, 28-32

TOPIC TAGS: fiberglass, polyester plastic, cold hardening, bending strength, tensile strength, compressive stress, shear strength, elastic modulus

ABSTRACT: Fiberglass plastic (UP-1KhO) containing 60-65% resin was obtained from the polyester epoxy resin 11EDSM and benzoyl peroxide-dimethyl aniline - Co linoleate system at normal temperature and ≈0.5 kg/cm^2 pressure. The material was compressed at 3 kg/cm^2 in vacuo for 24 hr. The plastic obtained was hardened at 20-200C. Increase of the hardening temperature from 20 to 150C increased the yield of insoluble 11EDSM from 70 to 95% and the bending strength from 1860 to 2800 kg/cm^2 (Fig. 1). At 150C, the strength of the hardened plastic was highest when hardened for 12 hr. Polymerization of 11EDSM with isopropylbenzene hydroperoxide-Co linoleate or benzoyl peroxide-dimethyl aniline systems gave fiberglass plastics with inferior physical properties. The properties of VP-1KhO plastic, affected by the time and temperatures of

Card 1/4 UDC: 678.674.06:677.521

aging are tabulated

Table 1. Effect of water, fuels, and MS oil on the cold-hardened fiberglass plastic VF-1Kh0

MEDIUM	weight increase, %			
	before heat processing		after heat processing	
	24 hr	30 days	24 hr	30 days
A	0,90 0,83—0,97	3,2 3,0—3,5	0,30 0,25—0,40	1,35 1,3—1,45
B	0,1 0,02—0,1	—	0,01 0,002—0,02	0,2 0,12—0,25
C	0,17 0,15—0,19	0,2 0,17—0,21	0,1 0,07—0,13	0,2 0,12—0,28
D	0,65 0,64—0,87	0,70 0,65—0,90	0,73 0,3—1,0	0,97 0,85—1,1

A = H_2O; B = gasoline; C = kerosine; D = MS oil

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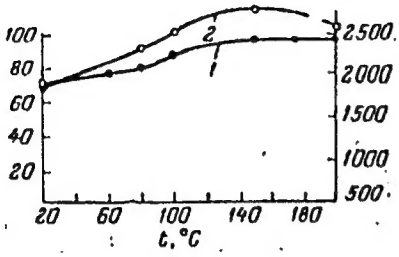

Fig. 2. 1) Yield of insoluble 11EDSM, %; 2) bending strength, kg/cm^2.
Influence of hardening temperature on yield of insoluble 11EDSM and bending strength of fiberglass plastic.

Table 3. Influence of the duration of aging at different temperatures on the mechanical properties of fiberglass plastic VP-1KhO hardened at normal temperature (60-65% of 11EDSM).

A = tensile; B = compression; C = bending; D = shearing; E = notch toughness; F = modulus of tensile elasticity; G = modulus of shearing elasticity; H = Poisson coefficient

Orig. art. has: 6 tables and 5 fig.

L 31921-66

ACC NR: AP6007967

	strength, kg/cm²				E	F	G	H
	A	B	C	D	kg·cm/cm	kg/cm²	kg/cm²	
Контрольные ($t_{исп}$=20 °C)	1125 780—1390	1310 1020—1615	1455 1075—1620	140 110—180	95 70—140	65600 59600—71600	25700	0,276
150 °C—12 ч ($t_{исп}$=20 °C)	1875 1555—2320	2240 1780—2545	1825 1315—2325	195 175—215	115 85—140	89100 76600—110800	35300	0,261
100 °C—200 ч ($t_{исп}$=100 °C)	1210 965—1420	2055 1820—2475	1105 1085—1140	85 65—110	90 85—130	—	—	—
150 °C—200 ч ($t_{исп}$=150 °C)	1130 995—1295	2265 1970—2445	855 810—960	65 55—85	90 80—110	50600 45200—58800	—	—
200 °C—200 ч ($t_{исп}$=200 °C)	980 900—1025	—	800 735—925	60 50—65	85 80—100	48600 37800—66700	—	—

$t_{исп}$ = aging temperature

SUB CODE: 11,07/ SUBM DATE: none/ ORIG REF: 004/ OTH REF: 005

Card 4/4

OZOLIN, Petr Karlovich; KRAVCHENKO, Lyubov' Kononovna; KRIVONOSOVA, N.A., red.

[Cultivation of roses in Uzbekistan] Kul'tura roz v Uzbekistane. Tashkent, "Uzbekistan," 1965. 47 p.
(MIRA 18:12)

KRAVCHENKO, L.K.

Phenology of wild species of the genus Vitis L. in Tashkent. Uzb. biol. zhur. no.3:27-34 '60. (MIRA 13:7)

1. Botanicheskiy sad AN UzSSR.
(TASHKENT--GRAPEVINES) (PLANT INTRODUCTION)

VAL'TSEV, V.K.; ARTAMONOVA, S.M.; DIDORA, N.F.; KRAVCHENKO, L. Kh.

Precipitation of elements from molten salts. Report No.1: Precipitation of certain elements from molten ammonium nitrate. Izv.Sib. otd. AN SSSR no.4:38-42 '61. (MIRA 14:6)

1. Institut neorganicheskoy khimii Sibirskogo otdeleniya AN SSSR, Novosibirsk.

(Ammonium nitrate)
(Precipitation (Chemistry))

VAL'TSEV, V.I.; ARTAMONOVA, S.M.; KRAVCHENKO, L.Kh.

Precipitation of elements from molten salts. Report No.2: Precipitation of nitrates and nitrites of the alkali metals from melts. Izv.Sib.otd.AN SSSR no.5:59-65 '61. (MIRA 14:6)

1. Institut neorganicheskoy khimii Sibirskogo otdeleniya AN SSSR, Novosibirsk.

(Alkali metal salts)

KRAVCHENKO, L.K.

Species of Amorpha of the Botanical Garden and their biological characteristics. Introd.i akklim.rast. no.1:213-223 '62.
(MIRA 16:2)
(Tashkent--Amorpha)

L 13013-63 EWP(q)/EWT(m)/BDS AFFTC/ASD JD/JG
ACCESSION NR: AP3002908 S/0289/63/000/001/0152/0154 57 56

AUTHOR: Val'tsev, V. K.; Avvakumov, Ye. G.; Py*r'yev, M. F.; Kravchenko, L. Kh.

TITLE: Separation of lanthanides in ammonium nitrate with the help of zone crystallization. Part 3 16

SOURCE: AN SSSR. Sibirskoye otdeleniye. Izvestiya. Seriya khimicheskikh nauk, no. 1, 1963, 152-154

TOPIC TAGS: zone crystallization, La, Nd, Er, Sm, Gd, Yt, lanthanide separation

ABSTRACT: The possibility of separating La, Nd, Er, Sm, Gd, and Yt as double sulfates from ammonium nitrate melts by zone crystallization was investigated. Separation was indicated after only 3 passes of the molten zone at 0.82 cm/hr, using ammonium sulfate as precipitant; the lanthanide double sulfates settled out in the central portion of the bar. (Ammonium oxalate was also effective as precipitant.) The lighter element is more concentrated in the latter part of the ingot; it dissolves more readily in the NH sub 4 NO sub 3 than the heavy element and passes to the end of the ingot. Optimum conditions for selective separation (selection of precipitant, length of ingot, number of passes, lanthanide concentration, etc.) remain to be worked out. Orig. art. has: 2 tables and 2 fig.

Card 1/2 Association: Inst. of Inorganic Chemistry, Siberian Dept. AN SSSR

87573

18.8200 1045 1413 1454

S/184/59/000/006/004/006
A104/A026

AUTHORS: Shevelkin, B.N.; Candidate of Technical Sciences, Bogoslovskiy, I.M. and Kravchenko, L.L.; Engineers

TITLE: On the Choice of a Method for Pressure Processing of Two-Layer 20K-X 18H12M2T (20K-Kh18N12M2T) Steels

PERIODICAL: Khimicheskoye mashinostroyeniye, 1959, No. 6, pp. 40 - 42

TEXT: The article deals with new structural steels. The double-coated steelconsisting of a carbon-steel primer with a 08X13 (08Kh13) and 1X18H9T (1Kh18 N9T) acid-proof steel coating used in chemical and petroleum engineering shows inadequate corrosion resistance. For heavy boilers the use of double-coated steel with Kh18N12M2T steel plating is recommended. Tests on pressure processing of double-coated 20K-Kh18N12M2T 35-mm steel carried out by the Leningradskiy filial NIIKhIMMASh (Leningrad Branch of the All-Union Design and Scientific Research Institute of Chemical Machinery) are described. Plastic properties tested at temperatures of 20-1,180°C are highest at normal temperatures and at 1,100-1,180°C. The adhesive strength between the primer and the coating was determined by shearing and tearing tests on a 5-ton tensiometer at 20, 700, 800, 1,000, 1,100 and

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S/184/59/000/006/004/006
A104/A026

On the Choice of a Method for Pressure Processing of Two-Layer 20K-X18H12M2T(20K--Kh18N12M2T) Steels

1,180°C. The influence of heating time on the adhesive strength between primer and coating was tested during 15, 30, 60 and 120 minutes heating time at 1,100°C and subsequent water cooling. The behavior of double-coated steel during bending and its influence on intercrystalline and general corrosion of the coating was tested under cold and hot conditions (1,000°C) on 35-mm cross-section samples. Bending was done by stamps with a radius curvature of 16, 24 and 40 mm. The improving properties of heat processing on strained metal was tested by annealing at 750 - 950°C for 3 hours followed by air cooling, and tempering at 1,000°C for 25 min and subsequent air cooling (for austenitic steel alloys). Metallographic tests revealed no damage to the adhesion of 20K (20K) and Kh18N12M2T double-coated steel during bending, despite of the separation of a carbide layer of 0.03 - 0.1 mm at the contact line of the primary layer and the coating. Doublecoated steel can be strained either hot or cold for stamping purposes; stamping itself should be performed at 1,180 - 900°C. As the shearing and tearing strength decreases during prolonged heating prior to stamping, this should be curtailed as much as possible. The permissible bending radius in hot or cold conditions is: 3 - 3.5 a (cold) for outward bending (T = 1,200 - 400°C) and 4 - 2.5 a for inward bending.

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87573
S/184/59/000/004/004/006
A104/A026

On the Choice of a Method for Pressure Processing of Two-Layer 20 - 18 12 2 (20K -Kh18N12M2T) Steels

Three month tests proved that all samples subjected to bending, welding and various thermal processings revealed hardly any corrosion losses. There are 5 figures.

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S/184/60/000/005/004/021
A104/A026

18.7400

AUTHORS: Shevelkin, B.N., Candidate of Technical Sciences; Kravchenko, L.L.; Bogoslovskiy, I.M.; - Engineers

TITLE: Investigation of the Processability of Laminated Steel-Silver Sheets

PERIODICAL: Khimicheskoye mashinostroyeniye, 1960, No. 5, pp. 37 - 39

TEXT: A new type of silver coated steel was developed by the Giprotsvetmetobrabotka (State Designing, Planning and Scientific Research Institute for Processing Nonferrous Metals). The sheets consist of a "steel 10" basic layer coated with 99.98% silver. Firm adhesion between the base metal and the coating is ensured by a special-alloy interlayer, vacuum heated prior to hot rolling. Tests were performed in the NIIKhIMMASh (All-Union Designing and Scientific Research Institute of Chemical Machinery). Figure 1 shows the structure of the base metal (1), interlayer alloy (2) and the silver coating (3).

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S/184/60/000/005/004/021
A104/A026

Investigation of the Processability of Laminated Steel-Silver Sheets

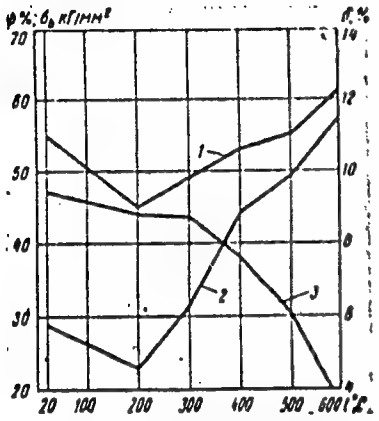

Figure 2 shows the effects of heating at 20 - 600°C, i.e., relative contraction (ψ); relative elongation (δ) and tensile strength (σ_b). Buckling tests were performed at 20 - 700°C. Elongation properties were tested on solid or welded ingots, which were cold forged into 400 and 700 mm diameter bottoms with inverted plating. Only the carbon-steel layer was welded before forging with ЭЧ2А (ECh2A) electrodes, the coating was applied afterwards. To avoid damage of coatings during forging the ingot was protected with parchment paper. The porosity of ingot and bottom coating was examined by application of filter paper soaked in a solution of 10 g NaCl, 10 g gelatine and 1 g $K_3Fe(CN)_6$ in 1 l of water. No porosity was found. Rolling tests included two 400 and 700 mm shells. Coating damages were avoided by interlayers of thin aluminum foils or strong paper. After rolling the coating was inspected as to porosity according to the described method. The authors' conclusion is: silver coated steel sheet of 5 mm or less showed satisfactory

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Investigation of the Processability of Laminated Steel-Silver Sheets

tensile strength and elasticity when subjected to buckling, elongation and rolling in cold state. Bottoms should be made from solid ingots or heat-processed welded ingots. Protective interlinings of parchment paper are necessary during pressure processing of silver-coated steel for stampings and thin aluminum foils and of strong paper for rolling. High surface cleanness of stamps and rollers are essential. Silver-coated steel is not suitable for cold or hot manual stamping. Porosity checks are indicated, any defects can be removed by dressing or welding. Thickness of welding should be checked with calipers, and the adhesion between base metal and coating by the electroacoustic method. There are 3 figures and 1 table.

Card 3/3

SHEVELKIN, B.N., kand.tekhn.nauk; BOGOSLOVSKIY, I.M., inzh.; KRAVCHENKO, L.L., inzh.

Investigating the pressure workability of steel-silver bimetallic sheets. Sbor.st. NIIKHIMMASH no.33:93-112 '60. (MIRA 15:5)
(Metalwork)

SHELKIN, B.N., kand.tekhn.nauk; KRAVCHENKO, L.L., inzh.; GOLOVANOVA, A.P., mladshiy nauchnyy sotrudnik

Investigating the pressure workability of Kh25T steel. Sbor.st. NIIKHIMMASH no.33:121-132 '60. (MIRA 15:5)
(Steel--Testing)

B/184/61/000/001/007/014
A104/A029

AUTHORS: Shevelkin, B.N., Candidate of Technical Sciences, Kravchenko, L.L., Golovanova, A.P., Engineers

TITLE: Investigation Into the Processibility of High-Chromium X25T (Kh25T) Steels by Pressure

PERIODICAL: Khimicheskoye Mashinostroyeniye, 1961, No. 1, pp. 37-40

TEXT: The necessity for nickel economy is stressed, followed by the description of the results of tests carried out by the NIIKhIMMASh on the processibility of high-chromium Kh25T steels by pressure. Changes of the mechanical properties of Kh25T steel during tests at 20-1,100°C are shown in Fig. 1. During cooling from 0 to -70°C a marked decrease of resilience accompanied by slight improvement of tensile strength was observed. Elongation tests at temperatures below zero were carried out in a thermostat installed in a breaking machine. Cooling was achieved by sublimation of solid carbon dioxide in ethyl alcohol. After elongation, bending, etc. the processed samples were heated in order to diminish the deformation force. The samples were subjected to repeated heating at temperatures of

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S/184/61/000/001/007/014
A104/A029

Investigation into the Processibility of High-Chromium X25T (Kh25T) Steels by Pressure

1,000 - 1,180°C for varying lengths of time. Simultaneously the effect of subsequent thermal treatment on their mechanical properties was tested at 760-780°C, followed by rapid water cooling. A number of samples subjected to single or repeated heating up to 1,180°C of various duration and cooling rates were tested for tendency to intercrystallite corrosion under the supervision of I.G. Volikova. Tests were carried out in a copper sulfate solution (120 hours), 65% boiling nitric acid (96 hours) and 55% phosphoric acid (480 hours) at 70-80°C. Bending tests were performed on samples cut lengthwise and across rolled sheets at 100 - 1,180°C; the samples were then subjected to corrosion tests according to the above method plus soaking (2 x 48 hours) in 97% boiling acetic acid. The actual degree of deformations was determined by marking circles of 30 mm in diameter on slabs before pressing and measuring the ovals formed from these circles after pressing. Hardness and expansion tests of various sections of the bottoms revealed that hardness, deformation, tensile strength and

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S/184/61/000/001/007/014
A104/A029

Investigation Into the Processibility of High Chromium X25T (Kh25T) Steels by Pressure

yield limit increase towards the edges. The following recommendations were made: expansion and bending of Kh25T steel can be performed without heating (at $t \geq 15^{\circ}C$) or with heating to 900-700°C. The heating time must not exceed 20 min. Under these conditions the fine-grained structure is preserved and satisfactory plastic properties are achieved. The bending radius should not be less than 2.5 of the metal thickness (cold) or 1.5 (heated). Parts subjected to bending and expansion under hot condition should be heat-treated at 760-780°C for 2-3 min per mm, followed by rapid water cooling. Kh25T steels showed no tendency to intercrystallite corrosion after being pressure treated either cold or heated to 900-700°C for 20 min. The high corrosion resistance of Kh25T steels in 55% phosphoric acid and 97% boiling acetic acid was established. After deformation processing (either cold or at temperatures not exceeding 900°C) Kh25T steels showed high corrosion resistance and did not tend to intercrystallite corrosion in 65% nitric acid. Heated to above 900°C, the steel reveals a tendency to

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S/184/61/000/001/007/014
A104/A029

Investigation Into the Processibility of High Chromium X25T (Kh25T) Steels by Pressure

intercrystallite corrosion accompanied by rapid reduction of corrosion resistance. There are 6 figures.

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S/184/61/000/001/007/014
A104/A029

Investigation Into the Processibility of High Chromium X25T (Kh25T) Steels by Pressure

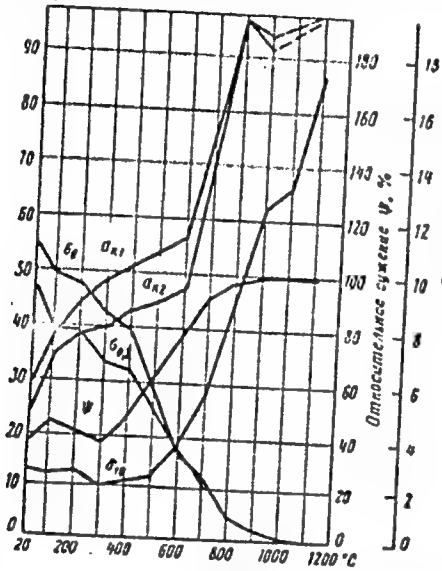

Fig. 1: Changes of the mechanical properties of Kh25T steels during tests at 20 - 1,100°C.
a_{k1} = samples cut lengthwise;
a_{k2} = across rolled sheet;
dashes = unfractured samples

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S/184/61/000/001/007/014
A104/A029

Investigation Into the Processibility of High Chromium Y25T (Kh25T) Steels by Pressure

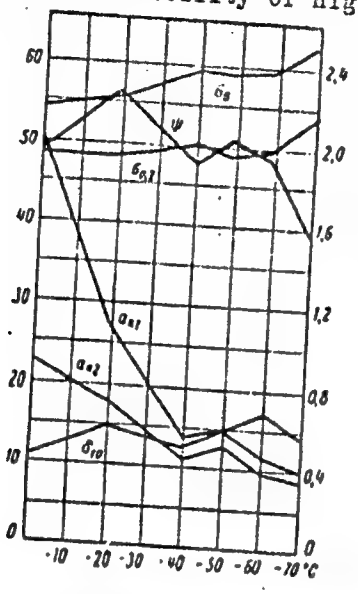

Fig. 2. Changes of the resilient force of Kh25T steel. 1. - after heating and air cooling; 2. - after heating and air cooling followed by thermal treatment and water hardening at 760-780°C

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21925

1.1200
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S/184/61/000/003/003/004
D041/D113

AUTHOR: Shevelkin, B.N., Candidate of Technical Sciences, Kravchenko, L.L., Golovanova, A.P., Bogoslovskiy, I.M., Engineers

TITLE: Investigations concerning the possibility of working titanium alloys by means of pressure

PERIODICAL: Khimicheskoye mashinostroyeniye, no. 3, 1961, 33-38

TEXT: The article contains some data of the above-mentioned investigations carried out at NIIKhIMMASh to be used in the manufacture of parts for devices of the chemical machine building industry. The investigations have been carried out on BT1 (VT1) alloy sheets, 1.5 to 8 mm in thickness and on OT 4 (OT 4) sheets 1.5 and 5 mm in thickness. Fig.1 shows that the stability (σ_B and $\sigma_{0.2}$) of the alloys decreases without variation when heated up from 20 to 700°. A maximum decrease in a temperature range of 20-400° has been observed with samples which had been cut out transversely to the rolling direction. Impact toughness variation of VT1 (6 mm thickness) and OT4 (5 mm thickness) in a temperature range of - 70 to + 1000° is shown in Fig.2. At temperatures close to 1000°, impact toughness values could not be obtained since

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Investigations concerning the possibility .....

the samples only buckled due to high plasticity; in Fig.2, this is shown by a dotted line. On investigating the mechanical properties of the VT1 titanium sheets (12 and 25 mm thick) there was no indication of anisotropy of the mechanical properties along the length and breadth of the rolling direction. The mechanical and plastic properties of the alloys were tested under various heat conditions. VT1 samples were heated in the furnace (from one to three times) up to 750°, OT4 samples up to 800° and cooled in the air; the soaking time was changed from 20 to 160 minutes, and the samples were cooled in different media (water, air and together with the furnace). The tests have shown that triple heating with 160 minutes' soaking at temperatures below allotropic conversions deteriorates only by 5-10% the plastic properties of both alloys. A corrosion test in a 1.5% H_2SO_4 solution indicated that a heating of up to 800° with short soaking (up to 30 minutes) does not change the corrosion resistance of the metal. Prolonged soaking at temperatures of 750° deteriorates the latter property. Table 3 shows the permissible bending radii obtained from investigations with cold and hot samples. After the bending tests, corrosion tests were carried out during 100 hours under the guidance of G.L. Shvarts. The technological media contained molybdenum trisulfide, molybdenum and tungsten sulfo-

Investigations concerning the possibility .....

salts, as well as hydrochloric acid and sulfide compounds. The corrosion speed of VT1 did not exceed 0.015 G/m^2hour, and of the OT4 0.06 G/m^2hour. Shells rolled out from titanium sheet with a lengthwise welding seam can be flanged with a local heating up to 300-350°, and in case the whole shell is hot, with a general heating up to 550-750°. The largest flange diameter is determined by the following formula:

$$D_{max} = d_{mean} \cdot Coef_{flanging}$$

The symbols are explained in Fig. 6a. Drawing tests with titanium alloys have been carried out in die-sets by means of a 30 ton hydraulic press. As punch material C435-52 (SCh 35-52) chromium-nickel cast iron is recommended; the dies should be made of the same cast iron with steel inserts or of steel whose surface has been consolidated to a hardness of RC 56-60. The working surface of the punches and dies must have a fineness of ▽ 9, and if higher accuracy is required, the surfaces must be polished. Bottom stamping from titanium alloys was also effected. The following conclusions were drawn: 1. Bottom stamping from VT1 with a relative elongation of more than 20% can be effected in the cold state; if the press has not the necessary capacity, the punches and blank should be heated to temperatures of

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Investigations concerning the possibility .....

300-350° or the blank should be heated to 550-750°. Bottom stamping from VT1 with a relative elongation of less than 20% in the cold state is not recommended. Bottom stamping from OT4 alloy should be carried out by heating the die-set and the blank to temperatures of 300-350° or by using a hot piece with temperatures of 650-850°. 2. Die-sets for stamping elliptical bottoms should have a curvature radius of (2-3) δ, and a clearance (unilateral) between die and punch of $z = (1.05 \div 1.11)\delta$. 3. Cold stamping requires XBЛ-21 (KhVL-21) or 9-32 lacquers as lubricants for covering the blanks, as well as water-colloidal preparations like B-0 (V-0) or B-1 (V-1). For hot stamping it is recommended to use V-0, and V-1 or dry graphite to be sprayed on the surface. 4. The blank's edges should be evenly cut and the burr removed. 5. In order to increase the plasticity and remove the remaining inner strains, a heating to 550-600° with a soaking of 3-4 minutes per every mm of the bottom-wall thickness must be effected. 6. Corrugations and bulges can be removed by secondary stamping or by heating them up to 400-500° and hammering with a copper hammer on the die. Flanging, expanding, flattening, bending and rolling tests with cold VT1 pipes (diameter - 26 mm, wall thickness - 1.5 mm) have been carried out. The VT1 had a stability limit of 46.6 kG/mm^2 and a relative elongation of 21.5%. The tests

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21925

Investigations concerning the possibility S/184/61/000/003/003/004
D041/D113

gave satisfactory results. 26 x 1.5 mm pipes in a framework with apertures of 26.4, 26.6, and 26.8 mm have undergone rolling tests: no defects appeared on the surface and the expansion degree was 0.7-1.5% which corresponds to the HMX-105-56 (NMKh-105-56) standard. Technological tests with 25 x 1.2 and 38 x 3 mm VT1 pipes gave bad results. The pipes disintegrated along the welding seam. There are 7 figures and 6 tables.

X

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S/184/62/000/005/002/003
D040/D113

AUTHORS: Shevelkin, B.N., Candidate of Technical Sciences; Kravchenko, L.L. and Golovanova, A.P., Engineers

TITLE: Pressability of Khl7T and Khl7N2 high-chromium steels

PERIODICAL: Khimicheskoye mashinostroyeniye, no. 5, 1962, 28-32

TEXT: The behavior of Х17Т (Khl7T) and Х17Н2 (Khl7N2) Cr steels belonging to a class containing 17-25% Cr has been studied at NIIKhIMMASh in bending and extrusion, and in corrosive media after such working. The experiments were conducted so as to find substitutes for scarce acidproof Ni-Cr steel grades used in the chemical industry. Changes in the mechanical properties and corrosion resistance of bent and extruded specimens were studied at various temperatures (-70 to + 1180°C) and in boiling acids. Both steels proved applicable under certain conditions: (1) Bending with slight strain is possible at above 15°C, while more complex shaping with more strain is possible only when heating is applied. The proper heating ranges for Khl7T and Khl7N2 steels are 1000-750°C and 1150-950°C respectively. (2) Heat treatment is needed after hot extrusion;

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for Kh17T the proper treatment is heating to 760-780°C, holding for 3-4 min per 1 mm thickness and cooling in air; Kh17N2 has to be quenched at 1100°C, held for 3-4 min per 1 mm thickness, cooled in oil, tempered at 680°C, held for 3-4 min per 1 mm thickness, and finally cooled in air; intercrystalline corrosion appearing in Kh17N2 after heating over 900°C can be eliminated by heating to 680°C, holding for 15-20 min per 1 mm thickness, and then cooling in air. The bending radii in cold bending should not be less than three thicknesses of metal for Kh17T, and five thicknesses for Kh17N2. In hot bending, the minimum radii should be two thicknesses of metal irrespective of the type of steel. There are 5 figures and 1 table.

ACCESSION NR: AR4027677 S/0276/64/000/001/V003/V003

SOURCE: RZh. Tekhnologiya mashinostroyeniya, Abs. 1V4

AUTHOR: Shevelkin, B. N.; Kravchenko, L. L.

TITLE: A study of the pressure treatment of tantalum and niobium

CITED SOURCE: Tr. Vses. n.-i. i konstrukt. in-t khim. mashinostr., vy*p. 43, 1963, 54-65

TOPIC TAGS: tantalum, niobium, tantalum pressure treatment, niobium pressure treatment

TRANSLATION: The authors give data on changes in the mechanical properties of Ta and Nb upon heating from 20 to 300° and cooling from 0 to -70°, as well as technological properties upon bending, roll forming, extrusing, (tube) expanding, and pipe flanging. On the basis of the results of studies the authors suggest minimum bending radii for Ta and Nb, as well as temperature regimes for their treatment. 6 illustrations. I. Gendlina.

DATE ACQ: 03Mar64 SUB CODE: ML ENCL: 00

Card 1/1

L 7009-65 EWT(m)/EPF(n)-2/EWP(k)/EWP(q)/EWP(b) Pf-4/Pu-4 ASD(f)/
ASD(m)-3 JD/HW/JG/WB

ACCESSION NR: AP4045199 S/0314/64/000/001/0025/0027

AUTHOR: Shevelkin, B. N. (Candidate of technical sciences); Kravchenko, L. L. (Engineer)

TITLE: Investigation of pressure working of tantalum and niobium

SOURCE: Khimicheskoye i neftyanoye mashinostroyeniye, no. 1, 1964, 25-27

TOPIC TAGS: tantalum, niobium, tantalum sheet cold forming, niobium sheet cold forming, tantalum stamping, niobium stamping, tantalum flanging, niobium flanging, optimum heat treatment

ABSTRACT: Pressure working of 99.3%-pure tantalum and 98.9%-pure cast and rolled niobium sheets, 1 mm thick, has been investigated. In preliminary tensile tests at 20, 100, 200, and 300C and particularly in cold bending tests, both tantalum and niobium in the initial condition exhibited a sharp anisotropy which, however, was greatly reduced, and in the case of cast niobium completely eliminated, by annealing at 1450—1500C for one hour in a vacuum of 0.002 mm Hg or at 1200C for one hour in a vacuum of 0.00005 mm Hg. The heat treatment also sharply

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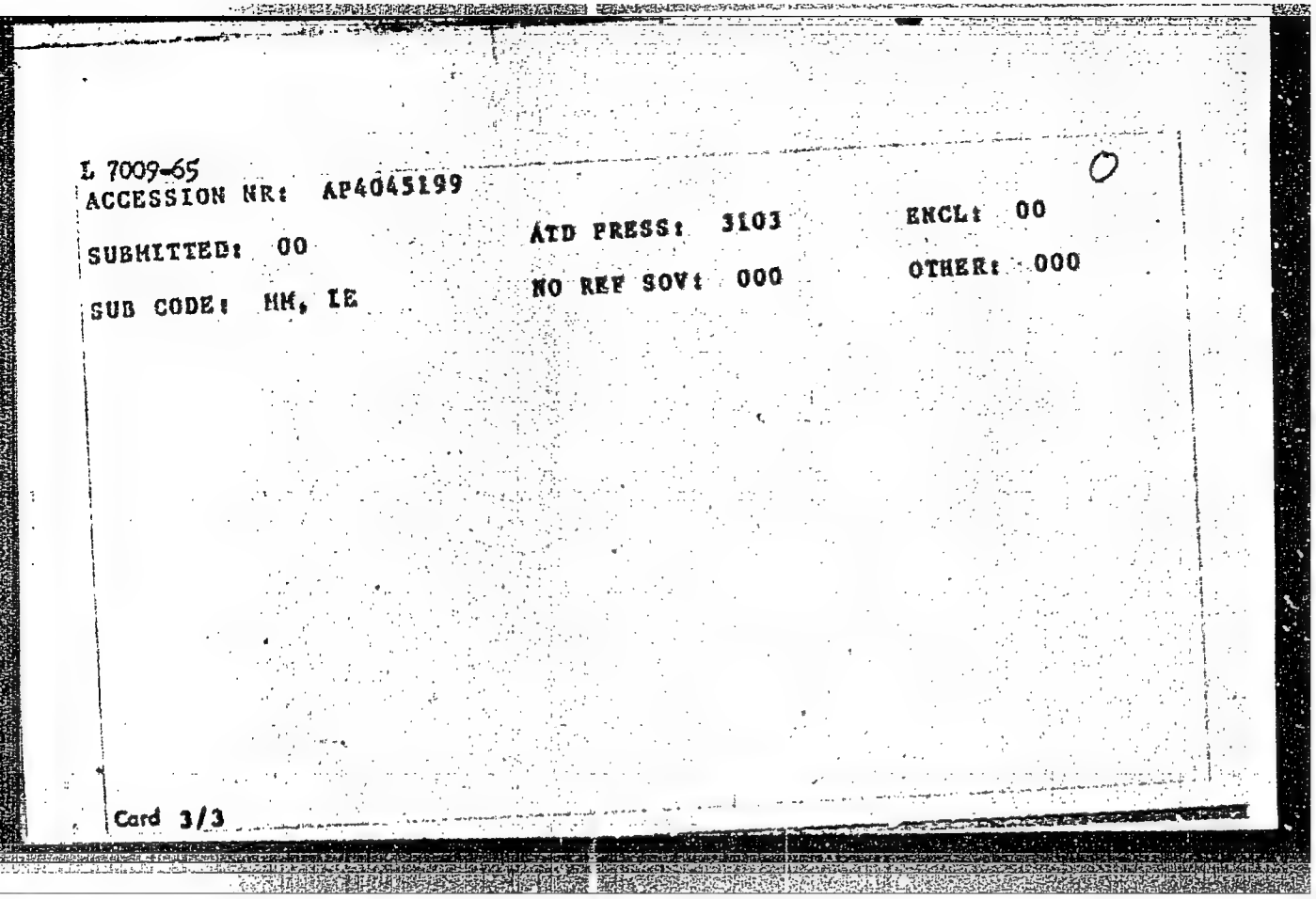
improved the ductility and decreased the strength of both metals. The anisotropy of the mechanical properties and its elimination by the heat treatment described above was also observed in the cold roll forming of shells 25 and 30 mm in diameter and 90 and 25 mm long. Shallow covers, 50 and 125 mm in diameter, have been successfully cold stamped from untreated tantalum and cast niobium using graphite lubricants. But stamping covers from MIG-welded blanks of tantalum and cast or sintered niobium was unsuccessful without preliminary heat treatment of the blanks. Preliminary heat treatment was also necessary for tube expanding and flanging. Annealing at 1200C for one hour in a vacuum of 0.00004 mm Hg permitted the expansion of tantalum tubes by 2.3—3.1%, of cast niobium tubes by 1.95—2.3%, and of sintered niobium tubes by 1.17—1.56%. The corresponding figures for cold flanging were 60, 36, and 32%. Corrosion resistance of all pressure-worked specimens was not affected by the sustained plastic deformation. Orig. art. has: 3 figures and 3 tables.

ASSOCIATION: none



L 7009-65
ACCESSION NR: AP4045199

SUBMITTED: 00 ATD PRESS: 3103 ENCL: 00

SUB CODE: MM, IE NO REF SOV: 000 OTHER: 000

Card 3/3

L 12838-65 EWT(m)/EWA(d)/EWP(v)/EWP(t)/EWP(k)/EWP(b) Pf-4 ASD(m)-3/
ASD(a)/AFWL/SSD/ESD(dp) MJW/JD/BM/EM
ACCESSION NR: AP4046171 S/0314/64/000/003/0033/0034

AUTHOR: Shevelkin, B. N.(Candidate of technical sciences); Kravchenko, L. L. (Engineer)

TITLE: Investigation of the pressure machinability of the clad steel St.3-OKh23N28M3D3T

SOURCE: Khimicheskoye i neftyanoye mashinostroyeniye, no. 3, 1964, 33-34

TOPIC TAGS: steel, clad steel, steel sheet, ferrite, pearlite, ductility, bending, drawing, punching, guillotine cutter, peeling, rolling / steel 3, steel OKh23N28M3D3T

ABSTRACT: The mechanical and technological properties of 10-mm-thick sheets of clad steel (base sheet of St.3: 8 mm; cladding sheet of OKh23N28M3D3T: 2 mm), annealed at 900C for 2 hours and quenched in air, were investigated at the NIIkhimmash. The microstructure of the clad steel is illustrated. The structure of steel OKh23N28M3D3T consists of austenite grains, at the boundaries of which a second phase consisting of small carbide particles is found; the base metal St.3 consists of small ferrite and pearlite grains. The variation in the mechanical properties of this clad steel was investigated during short-term heating and cooling. Generally, the strength and yield point decreased on heating and increased on cooling, with the opposite behavior for plasticity. The shear strength in the

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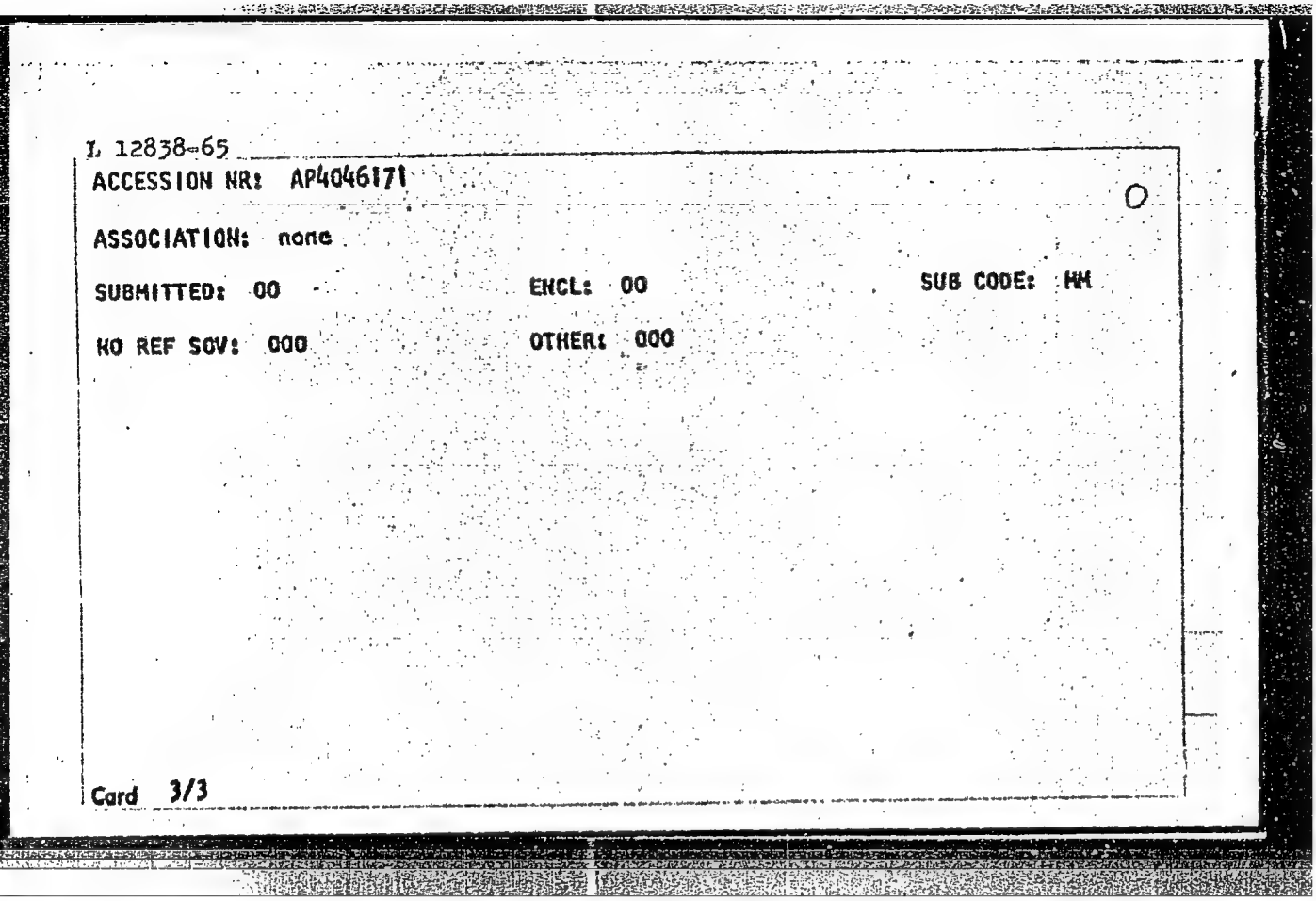
cold is 15.7 kg/mm^2, and the maximum peeling strength is 21.4 kg/mm^2. The effect of prolonged heat treatment on the mechanical and plastic properties of the clad steel was also investigated, showing that repeated heating to 1000C does not decrease the plasticity. Bending tests were made in the cold and over a temperature range of 100-1000C on samples cut transversely to the casting direction. The samples were bent to 180° by stamps with a bending radius of 2--16 mm. The minimum permissible bending radii were determined on both samples clad from outside and samples clad from inside. Drawing of the clad steel was investigated by punching spherical cup-like samples with a diameter of 200 mm in the cold on a hydraulic press under a pressure of 200 tons, from both one-piece and welded (two-piece) ingots. No defects were found in the castings, and the bonding strength of the two layers remained unchanged. The degree of deformation increased from the spherical bottom part toward the edge and reached 25.7%. It was established that drawing of St.3-OKh23N28M3D3T clad steel can be accomplished in the cold from either one-piece or welded ingots. The clad steel was then cut with a guillotine cutter; cutting on the cladding layer produced no peeling, but after cutting, the edges had to be treated. Rolling had to be carried out in the cold. "The metallographic tests were carried out under the direction of A. P. Akshentseva." Orig. art. has: 4 figures and 1 table."



L 12838-65

ACCESSION NR: AP4046171

ASSOCIATION: none

SUBMITTED: 00 ENCL: 00 SUB CODE: HM

NO REF SOV: 000 OTHER: 000

Card 3/3

LI, P.F.; KRAVCHENKO, L.M.

Genesis of the Malyy Atlym dislocations. Trudy SNIIGGIMS no.1:36-39 '59. (MIRA 15:4)
(Malyy Atlym region—Geology, Structural)

KORNEYEVA, V.G.; ANSIMOV, V.V.; KRAVCHENKO, L.M.

Combined oil and gas prospecting method to be applied in the western part of the West Siberian Plain. Trudy VNIGRI no.140:354-386 '59. (MIRA 13:6)
(West Siberian Plain—Petroleum geology)
(West Siberian Plain—Gas, Natural—Geology)

KRAVCHENKO, L. M.

USSR/Cultivated Plants - Fruits and Berries. M-5

Abs Jour : Ref Zhur - Biol., No 3, 1958, 10974

Author : Kravchenko, L.m.

Inst : Uman' Pedagogical Institute.

Title : Particulars of the Vegetative Reproduction of Hybrid Apple Seedlings.

Orig Pub : Nauk. zap. Umans'k. ped. in-t, 1956, 3, 65-67

Abstract : As a result of experiments on vegetative reproduction in hybrid apple seedlings it has been made clear that they behave differently. Some multiple well from root sprouts, others -- from stem cuttings. Some seedlings take root invariably when the roots are planted. This method of reproduction has great advantages for the selector since the variety does not lose its valuable qualities.

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КРАВЧЕНКО, Л. М.

USSR/Cultivated Plants _ Fruits and Berries. M-5

Abs Jour : Ref Zhur - Biol., No 3, 1958, 10975

Author : Kravchenko, L.M.

Inst : Uman Pedagogical Institute.

Title : The Influence of the Pollinator Variety on the Formation of Fruit Characteristics in Young Hybrid Apple Plants.

Orig Pub : Nauk. zap. Umans'k ped. in-t, 1956, 3, 73-79

Abstract : When pollinated with pollen of one variety, young hybrid apple plants give a lower percentage of fruit ovaries than when pollimated naturally. Different pollinator varieties give different percentages of ruit ovulation /zavyazyvaniye/. Parmen Zimnyy Zolotoy /Parmen Golden Winter/ gave the best results. The characteristics are heightened and intensified by repeated pollination with the same variety during the first years of the hybrid's fruit production.

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USSR/Cultivated Plants - Fruits and Berries. M-5

Abs Jour : Ref Zhur - Biol., No 3, 1958, 10975

Under the influence of old pollinator varieties the young hybrid apple plant's characteristics develop according to the characteristics of the pollinator varieties (shape, taste, flowering dates). These characteristics are preserved through subsequent vegetative reproduction. The old pollinator varieties can be grown as mentors for the formation of new hybrid apple sorts, in addition to other training methods.

Card 2/2

KRAVCHENKO, L.M., kandidat sel'skokhozyaystvennykh nauk.

Effect of mentors on speeding up the fruiting of hybrid apple seedlings. Agrobiologiia no.1:123-126 Ja-F '57. (MIRA 10:4)

1. Umanskiy pedagogicheskiy institut.
(Apple breeding) (Grafting)

KRAVCHENKO, L.M.

Changes in the physiologicomorphological characters of hybrid apple seedlings induced by the mentor effect. Nauch.dokl.vys. shkoly; biol.nauki no.1:187-193 '59. (MIRA 12:5)

1. Rekomendovana kafedroy botaniki Kremenetskogo gosudarstvennogo pedagogicheskogo instituta.
(APPLE BREEDING)

KRAVCHENKO, L.M.

Obtaining apple seedlings from intravarietal crossing as a method for improving the viability of the variety. Nauch. dokl. vys. shkoly; biol. nauki no.1:178-182 '62. (MIRA 15:3)

1. Rekomendovana kafedroy botaniki Kremenetskogo pedagogicheskogo instituta.

(APPLE--BREEDING)

MIZINOV, N.V.; KRAVCHENKO, L.M.; DYADYUK, N.F.; SHCHERBININ, V.S.

Prospects for finding oil and gas in the southwestern part of the West Siberian Plain in connection with the opening of the Lenin (Kurabash) oil field. Neftegaz.geol. i geofiz. no.1:9-14 '65. (MIRA 18:5)

1. Tyumenskaya kompleksnaya geologorazvedochnaya ekspeditsiya Tyumenskogo territorial'nogo geologicheskogo upravleniya.

ROMANOV, Arnol'd Konstantinovich; KRAVCHENKO, L.S., red.;
YELISTRATOVA, Ye.M., tekhn. red.

[Ferrite cores with rectangular hysteresis loops and their applications] Ferritovye serdechniki s priamougol'noi petlei gisterezisa i ikh primenenie. Novosibirsk, Izd-vo Sibirskogo otd-niia AN SSSR, 1963. 84 p. (MIRA 17:2)

LOGVINENKO, A.T., kand. tekhn. nauk, otv. red.; KLAVCHENKO, I.., red.

[Refractory aluminosilicate resources in the Kuznetsk Basin] Aliumosilikatnoe ogneupornoe syr'e Kuzbassa. Novosibirsk, Red.-izd.otdel Sibirskogo otd-niia AN SSSR, 1964. 111 p. (MIRA 18:1)

1. Akademiya nauk SSSR. Sibirskoye otdeleniye. Khimiko-metallurgicheskiy institut.

KHRISTOFOROV, B.S.; KONDRAT'YEV, V.M., kand. khim. nauk, retsenzent; MISHCHENKO, M.A., retsenzent; TIMERBULATOVA, M.I., retsenzent; NOVIK, I.V., retsenzent; PETRENKO, A.G., retsenzent; MAR'YEVA, N.N., retsenzent; LEVIN, I.S., retsenzent; BUSEV, A.I., prof., otv. red.; KRAVCHENKO, L.S., red.

[Selective solvents in mineral phase analysis] Izbiratel'nye rastvoriteli v veshchestvennom analize. Novosibirsk, Red.-izd. otdel Sibirskogo otd-niia AN SSSR, 1964. 95 p. (MIRA 17:12)

1. Moskovskiy gosudarstvennyy universitet (for Busev).

KRAVCHENKO, L.T.

USSR/Medicine - Mercusal Dec 48
Medicine - Acute Nephritis

"Use of Mercusal in Acute Nephritis," L. T. Kravchenko, Therapeutic Clinic, Inst of First Aid imeni Sklifosovskiy, 1 1/5 pp

"Sov Med" No 12

Mercusal is the most powerful diuretic known. Its effect does not depend on the amount of mercury but on all the molecules and the position of mercury in mercusal. Because of its mildness and effectiveness it is indicated in all kidney troubles, including acute nephritis, especially in cases of anuria,

60/49T67

USSR/Medicine - Mercusal (Contd) Dec 48

eclampsia, emphysema and asthma. Further study of its method of action, etc., is needed.

60/49T67

KRAVCHENKO, E. YA.

18(0) PHASE I BOOK EXPLOITATION SOV/1728

Akademiya nauk SSSR. Institut metallurgii

Sovremennyye problemy metallurgii (Modern Problems in Metallurgy) Moscow, Izd-vo AN SSSR, 1958. 640 p. 3,000 copies printed.

Resp. Ed.: A.M. Samarin, Corresponding Member, USSR Academy of Sciences; Eds. of Publishing House: V.S. Rzhevnikov, and A.N. Dernov; Tech. Ed.: T.V. Polyakova.

PURPOSE: This book is intended for scientific and technical personnel in the field of metallurgy.

COVERAGE: This is a collection of articles on certain aspects of Soviet metallurgy. The book is dedicated to Academician Ivan Pavlovich Bardin on the occasion of his 75th birthday. The book is divided into seven parts. The first part consists of two articles presenting a brief account of the biography and professional activity of the Soviet metallurgist. It includes an article by John Chipman, Nicholas Grant, and John Elliott (M.I.T., USA) describing their meeting with Bardin in Moscow and also his visit to the United States. The second part consists of three articles and deals with raw materials and fuels for the Soviet metallurgical industry. The third part represents the major portion of the book. It consists of 25 articles dealing with the various aspects of the metallurgy of pig iron and steel. The fourth part consists of two articles treating the metallurgy of nonferrous metals. The fifth part consists of three articles on the forming of metals. The sixth part consists of eight articles discussing certain aspects of physical metallurgy. The last part deals with general problems in the field of metallurgy. References are given after each article. No personalities are mentioned.

TABLE OF CONTENTS:

Modern Problems in Metallurgy SOV/1728

AVAILABLE: Library of Congress

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SKOROKHODOV, N.Ye., dotsent; CHELYSHEV, N.A., kand.tekhn.nauk; ZAYKOV, M.A., dotsent; FROLOV, N.P., inzh.; KOROLEV, A.S., inzh.; KRAVCHENKO, L.Ya., inzh.; SKOROKHODOVA, V.F., inzh.; ABAKUMOV, V.A., dotsent [deceased]; KAFTANOV, M.P., inzh.

Investigating conditions of rolling plain and shaped sections on a medium-shape rolling mill. Trudy NTO Chern.met. 15:24-55 '59. (MIRA 13:7)
(Rolling mills)

KRAVCHENKO, L.Ya.; KOBYZEV, V.K.

Ways to save metal. Metallurg 7 no.4:26-27 Ap '62.
(MIRA 15:3)

1. Glavnyy prokatchik Kuznetskogo metallurgicheskogo kombinata (for Kravchenko). 2. Nachal'nik prokatnoy laboratorii Kuznetskogo metallurgicheskogo kombinata (for Kobyzev).
(Novokuznetsk—Rolling (Metalwork))

SHAMOVSKIY, E.Kh.; ZYKOV, A.D.; KAFTANOVA, Z.K.; KRAVCHENKO, L.Ya.; FROLOV, N.P.; ZHURAVKIN, Ye.A.; GORBATYUK, V.L.

Mechanizing the flame scarfing of blooms. Metallurg 7 no.8:24-27 Ag '62. (MIRA 15:9)

1. Sibirskiy metallurgicheskiy institut i Kuznetskiy metallurgicheskiy kombinat.
(Steel ingots) (Metal cleaning)

VYZGO, M.S.; KRAVCHENKO, L.Z.

Examples of the forecasting of local erosion at installations and its verification on the basis of an operational experiment. Vop. gidr. no. 12:29-48 '63. (MIRA 17:5)

1. Chlen-korrespondent AN UzSSR (for Vyzgo).

KRAVCENKO, Mihajlo, ing. (Zagreb, Rapska 27); FINGERHUT, Leo. (Zagreb, Prilaz JNA 18)

On grouting under pressure of hydraulic tunnels. Tehnika Jug 17 no.4:650-657 Ap '62.

1. Referent operative u Odjelu za injekcione radove Poduzeca "Elektrosond" iz Zagreba (for Fingerhut).

KRAVCHENKO, M.

Chem Abs v47
1-25-54
3 works

Laboratory in the contest for the improvement of quality of milk and milk products. M. Kravchenko (Aleksandrovsk Cheese Factory). *Molochnaya Prom.* 14, No. 9, 9–10(1953).—The quality control of milk produced on 30 dairy farms in 1952 based on the feeding practices and the handling of raw milk are discussed. V. N. K.

KRAVCHENKO, M.

Level of production was raised. Mast.ugl. 3 no.2:8-9 F '54.
(MLRA 7:3)

1. Nachal'nik uchastka shakhtoupravleniya No.100-77 kombinata Voroshilovgradugol'. (Coal mines and mining)

14(3) SOV/176-58-7-13/17

AUTHOR: Kravchenko, M., Guards Lieutenant Colonel

TITLE: A Set for Enlarging and Demarking Passages in the Minefields. (Komplekt dlya ushireniya i oboznacheniya prokhodov v minnykh polyakh)

PERIODICAL: Voyenno-inzhenernyy zhurnal, 1958, Nr 7, pp 38-39 (USSR)

ABSTRACT: The author describes the construction and operation a set for enlarging and demarking passages in the minefields. It was suggested by Captain Leonov at the unit where officer Barinov is a military engineer. The set consists of: 24 links UZ-2; 24 supports to them; a bobbin with 110 m of wire for 24 detonators; another bobbin with a trunkline of 200 m, an explorer; 6 pointers marked "Passage"; 2 bobbins with cords of 70 m each and 12 supports, painted red-black, to hold the cords. Two sappers working under a commander can do the job in 13-16 minutes. The weight of the set

Card 1/2

SOV/176-58-7-13/17

A Set for Enlarging and Demarking Passages in the Minefields.

is 250 kg, and one set widens a passage of 3-4 m to a depth of 50 m. It can also be used for blowing up small bridges. There is 1 photograph.

Card 2/2

KRAVCHENKO, M., gvardii podpolkovnik

Our experience in constructing blindages. Voen.-inzh.zhur. 102
no.4:29-30 Ap '58. (MIRA 11:4)
(Military engineering)

PUSTOVALOV, V.I.; KRAVCHENKO, M.B.

Painting bicycle parts and units by the method of spraying paint in electric fields. Avt. i trakt. prom. no.12:40-42 D '57. (MIRA 11:1)

1. Khar'kovskiy velosipednyy zavod.
(Bicycles and tricycles--Painting)

KRAVCHENKO, M.B., inzh.; BOGOLYUBAYA, R.G., inzh.

Preparing the surfaces of steel and duralumin billets for cold extrusion. Mashinostroenie no.3:33 My-Je '64.
(MIRA 17:11)

AKSEL'ROD, S.M.; SOKHRANOV, N.N., nauchnyy red.; KRAVCHENKO, M.D., red.; BORUSHKO, T.I., red.izd-va; SHMAKOVA, T.M., tekhn. red.

[High-frequency methods for studying boreholes; induction and dielectric logging]Vysokochastotnye metody issledovaniia skvazhin (induktsionnyi i dielektricheskii karotazh). Moskva, Gosgeoltekhizdat, 1962. 31 p. (MIRA 16:2)
(Oil well logging, Electric)

VESELOV, K.Ye.; VASIL'YEVA, I.L.; KRAVCHENKO, M.D., red.; BORUSHKO, T.I., red.izd-va; SHMAKOVA, T.M., tekhn. red.

[KVG-1M gravimeter and its working principles]Gravimetr KVG-1M, printsip ustroistva i rabota s nim. Moskva, Gosgeoltekhizdat, 1962. 32 p. (MIRA 16:2)
(Gravimeter (Geophysical instrument))

NIKITSKIY, V.Ye.; BASKAKOV, N.A.; FEDYK, V.I., nauchn. red.; KRAVCHENKO, M.D., red.; IVANOVA, A.G., tekhn. red.

[Development of aeromagnetic prospecting for minerals in the U.S.S.R.] Razvitie aeromagnitnoi razvedki poleznykh iskopaemykh v SSSR. Moskva, M-vo geologii i okhrany nedr SSSR, 1962. 33 p. (MIRA 17:4)

TYAPKIN, K.F.; GOLIZDRA, G.Ya.; KRAVCHENKO, M.P., red.; LITVINENKO, O.K., nauchn. red.

[Brief review of present-day methods for weakening the regional background level of gravitation and magnetic fields] Kratkii obzor sovremennykh metodov oslableniia regional'nogo fona gravitatsionnogo i magnitnogo polei. Moskva, Gos.geologich. kom-t SSSR, 1963. 49 p.
(MIRA 17:7)

ARKHIPOV, A.Ya.; ALTAYEVA, N.V.; BAYBULATOVA, Z.K.; VISKOVSKIY, Yu.A.; GOLENKOVA, N.P.; KRAVCHENKO, M.F.; KUPRIN, P.N.; LEVIN, A.I.; POL'STER, L.A.; SEMOV, V.N.; SYRNEV, I.P.; USHKO, K.A.; SHOLOKHOV, V.V.; Prinimali uchastiye: RODIONOVA, M.K.; CHEL'TSOV, Yu.G.; KUZNETSOV, Yu.Ya., kand. geograf. nauk, nauchnyy red.

[Geology and oil and gas potentials of the south of the U.S.S.R.; Kara-Bogaz-Gol (Gulf) region (eastern part of the Middle Caspian oil- and gas-bearing basin).] Geologiia i neftegazonosnost' iuga SSSR; Prikarabozaz'e (vostochnaia chast' Srednekaspiiskogo neftegazonosnogo basseina). Leningrad, Nedra, 1964. 300 p. (Trudy Nauchno-issledovatel'skoy laboratorii geologicheskikh kriteriyev otsenki perspektiv neftegazonosnosti no.12).

KRAVCHENKO, M.F.; MERKLIN, R.L.; CHEL'TSOV, Yu.G.

Chokrakskoye deposits of the Krasnovodskiy Peninsula. Trudy MGRI 39:57-65 '63. (MIRA 16:10)

DIKENSHTEYN, G.Kh.; KUTUZOVA, V.V.; MASHKYKOV, K.K.; BABAYEV, A.G.; POL'STER, L.A.; YUFEREV, R.F.; SHISHOVA, A.I.; BAREYEV, R.A.; MAKAROVA, L.N.; MURADOV, K.; IVANOVSKAYA, I.A.; SEMOV, V.N.; SIROTINA, Ye.A.; TURKINA, I.S.; FEL'DMAN, S.L.; KHON, A.V.; KUNITSKAYA, T.N.; GOLENKOVA, N.P.; ROSHINA, V.M.; FARTUKOV, M.M.; SHCHUTSKAYA, Ye.K.; ALTAYEVA, N.V.; BYKADOROV, V.A.; KOTOVA, N.S.; SMIRNOV, L.N.; IBRAGIMOV, M.S.; KRAVCHENKO, M.F.; MARKOVA, L.P.; ROZYYEVA, T.R.; UZAKOV, O.; SLAVIN, P.S.; NIKITINA, Ye.A.; MILOGRADOVA, M.V.; BARTASHEVICH, O.V.; STAROBINETS, I.S.; KARIMOV, A.K.

[Splicing of the wires of overhead power transmission lines] Soedinenie provodov vozdushnykh linii elektroperedachi. Moskva, Energiia, 1964. 69 p. (Biblioteka elektromontera, no.132) (MIRA 17:9)

MENDELEYEV, Dmitriy Ivanovich; DOBROTIN, R.B., kand.khim.nauk; KRAVCHENKO, M.G. [translator]; KUPRIYANOVA, V.R. [translator]; STOROMKIN, A.V., prof., otv.red.; ZAYCHIK, N.K., red.izd-va; BLEYKH, E.Yu., tekhn. red.

[Scientific archives. Solutions] Nauchnyi arkhiv. Rastvory. Moskva, Izd-vo Akad.nauk SSSR, 1960. 179 p. (MIRA 13:8)
(Solution (Chemistry))

KRAVCHENKO, Aleksandr Ignat'yevich, inzh.; KRAVCHENKO, Marina Ignat'yevna, ordinator

Use of a digital computer in solving a problem on the cognition of a logical image described by discrete information. Izv. vys. ucheb. zav.; elektromekh. 8 no.4:472-473 '65.

(MIRA 18:5)

1. Nachal'nik laboratorii perspektivnykh razrabotok Vsesoyuznogo nauchno-issledovatel'skogo i proyektno-konstruktorskogo instituta elektrovozostroyeniya (for Kravchenko, A.I.). 2. Klinika nervnykh bolezney i neyrokhirurgii Rostovskogo meditsinskogo instituta (for Kravchenko, M.I.).

KRAVCHENKO, M. E., GORDINA, M.

Vowels

New method of treating kymographic curves for making a graph of the movement of basic vowel tones. Vest. Len. un. 6, No.8, 1951.

9. Monthly List of Russian Accessions, Library of Congress, _____1953. Unclassified.

1. KRAVCHENKO, M. K.

2. USSR (600)

4. Kemerovo Province - Calves

7. Controlled rearing of calves on Kemerovo Province state farms. Sots. zhiv. No 2 1953

9. Monthly List of Russian Accessions, Library of Congress, April 1953, Uncl.

[redacted], I. I.

Soviet Central Asia - Dairy Cattle

Developing new breeds of cattle. Sov. zootekh. 4, No. 1, 1953.

Monthly List of Russian Accessions, Library of Congress
June 1953. UNCL.

KRAVCHENKO, M.L., kand. biol. nauk

Producing the winter forms of durum wheat by crossing durum wheat with the rye Secale sereale viride variety. Agrobiologiia no.4:520-527 Jl-Ag '65. (MIRA 18:11)

1. Rovenskaya gosudarstvennaya sel'skokhozyaystvennaya opytnaya stantsiya, Rovenskaya oblast', selo Shubkovo.

KRAVCHENKO, M.L.

Cytoanatomical characteristics of tissue union in cereal embryos transplanted on dry grain. Zhur. ob. biol. 21 no.5:361-367 S-O '60. (MIRA 13:9)

1. State Experimental Agricultural Station, Cherkassk.
(GRAFTING) (GRAIN)

KRAVCHENKO, M.T. (Pervomaysk Nikolayevskoy oblasti)

First steps in the new curricula. Fel'd. i akush. 25 no.3: 51-52 Mr '60. (MIRA 13:6)

(NURSES AND NURSING)

KRAVCHENKO, M.Ye.

Strangulation of a small intestinal loop in the umbilical ring of a newborn. Khirurgiia 33 no.2:112-113 F '57. (MLRA 10:6)

1. Iz Zaymishchenskoy rayonnoy bol'nitsy Brusovskogo rayona Kalininskoy oblasti.

(HERNIA, UMBILICAL, in inf. and child
in newborn (Rus))
(INFANT, NEWBORN, dis.
hernia, umbilical (Rus))

KRAVCHENKO, M.Ye.

First results of the work of the Ostashkov Interprovince Hospital.
Zdrav. Ros. Feder. 4 no.3:14-15 Mr '60. (MIRA 13:5)
(OSTASHKOV DISTRICT--HOSPITALS)

KRAVCHENKO, M., podpolkovnik

Preparing antiaircraft guns for night firing. Voen.vest. no.9: 61-63 S '60. (MIRA 14:7)

(Antiaircraft guns)

KRAVCHENKO, N. and FONTON, S.

"Attempt at Cultivation of Ginseng Root in the Vicinity of Moscow." Okhrana Prirody, Book 13, pp 115-116, 1951.

KAVERZNEVA, Ye.D.; KRAVCHENKO, N.A.; KLEOPINA, G.V.

Nature of the enzymatic activity of lysozyme. Izv.AN SSSR Otd. khim.nauk no.4:729 Ap '61. (MIRA 14:4)

1. Institut organicheskoy khimii im. N.D.Zelinskogo AN SSSR.
(Lysozyme)

KRAVCHENKO, N.A.; KLEOPINA, G.V.; KAVERZNEVA, Ye.D.

Study of the catalytically active centers of lysozyme. Dokl. AN SSSR 144 no.1:118-121 My '62. (MIRA 15:5)

1. Institut organicheskoy khimii im. N.D.Zelinskogo AN SSSR. Predstavleno akademikom B.A.Kazanskim.
(Lysozyme) (Catalysis)

KRAVCHENKO, M.A.

PHASE I BOOK EXPLOITATION SOV/4511

Moscow. Tsentral'nyy institut prognozov

Voprosy gidrologii (Problems in Hydrology) Moscow, Gidrometeoizdat (Otd-niye) 1959. 98 p. (Series: Its: Trudy, vyp. 94) 800 copies printed.

Sponsoring Agencies: Tsentral'nyy institut prognozov; Glavnoye upravleniye gidrometeorologicheskoy sluzhby pri Sovete Ministrov SSSR.

Ed. (Title page): N.Ya. Podvishenskaya; Ed. (Inside book): V.S. Kornilenko; Tech. Ed.: T.Ye. Zemtsova.

PURPOSE: This publication is intended for hydrological forecasters in field offices of the Hydrometeorological Service. It will also be of interest to scientific research workers.

COVERAGE: This issue of the Transactions of the Central Institute of Weather Forecasting contains articles dealing with problems in hydrological forecasting. Individual articles discuss forecasting of snowmelt runoff, forecasting on the basis of groundwater, flood runoff and maximum discharge forecasting, etc. Evaluation of forecasting methods is given and their accuracy is analyzed. No personalities are

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mentioned. References follow each article.

TABLE OF CONTENTS:

KRAVCHENKO, N.A.

3(8,7) [illegible]

Vsesoyuz [illegible]

Trudy ... t. III: [illegible] Union [illegible] Leningrad, Gidrometeoizdat, 1959. 473 p. Errata slip [illegible] 2,000 copies printed.

Sponsoring agency: Glavnoye upravleniye gidrometeorologicheskoy sluzhby pri Sovete Ministrov SSSR.

Resp. Ed.: V.A. Uryvayev; Ed.: V.S. Protopopov; Tech. Ed.: N.I. Braynina.

PURPOSE: This work is intended for meteorologists, hydrologists, and hydrophysicists, particularly those engaged in the study of snow and ice and evaporation processes.

COVERAGE: This book contains papers on hydrophysics which were presented and discussed at the Third All-Union Hydrological Conference in Leningrad, October 1957. The Conference published 10 volumes on various aspects of hydrology of which this is number 3. The editorial board in charge of the series include: V.A. Uryvayev (Chairman), O.A. Alekin, Ye.V. Bliznyak (deceased), O.N. Borsuk, M.A. Velikanov, L.K. Davydov, A.P. Domanitskiy, G.P. Kalinin, S.N. Kritskiy, B.I. Kudelin, L.P. Manoim, N.P. Menkel', B.P. Orlov, I. V. Popov, A.K. Proskuryakov, D.L. Sokolovskiy, O.A. Spengler, A.I. Chebotarev, and S.K. Cherkavskiy. This volume is divided into 2 sections: the first contains reports from the subsection for the study of evaporation processes, and the second contains reports from the snow and ice subsection. References accompany each article.

VOYNICH, Ya.L., inzh.; KRAVCHENKO, N.A., inzh.

Use of a heat resistant EI765 alloy for bonding components.
Energomashinostroenie 8 no.10:37 O '62. (MIRA 15:11)
(Turbines)

KRAVCHENKO, N.A., inzh.; VOYNICH, Ya.L., inzh.

Use of a natural gas torch for heating and localized thermal treatment of components in the welding of turbines.
Energomashinostroenie 9 no.5:34-35 My '63. (MIRA 16:7)

(Turbines--Welding)

VOYNICH, Ya.L., inzh.; KRAVCHENKO, N.A., inzh.

Some new work of the Kirov Turbogenerator Plant in Kharkov.
Energomashinostroenie 10 no.7:48 Jl '64. (MIRA 17:9)

KRAVCHENKO, N. A.

"Study of the Synthesis of Beta (Alpha-Naphthyl)-Beta-Alanine and Some of Its Changes." Sub 23 May 51, Moscow Order of Lenin Chemico-technological Inst imeni D. I. Mendeleyev.

Dissertations presented for science and engineering degrees in Moscow during 1951.

SO: Sum. No. 480, 9 May 55

BODIONOV, V. V., PRAVOSHINSKO, N. A.

Amino Acids

Production and characteristics of B-(a-naphtyl)-B-aminopropionic acid. Dokl. AN SSSR 82 No. 2, 1952.

SO: Monthly List of Russian Accessions, Library of Congress, June 1953, Uncl.

NRAVCHENKO, N.A.

Characterization of β-(α-naphthyl)-δ-alanine. V. M. Rodionov, L. V. Antik, and N. A. Kravchenko. *Zhur. Obshchei Khim.* 23, 1823–42(1953); cf. C.A. 47, 2741g.—Heating 16 g. 1-$C_{10}H_7CHO$, 13.4 g. $CH_2(CO_2H)_2$, 32 g. NH_4OAc, and 40 g. AcOH 7 hrs. on a steam bath gave after extn. of the product with cold H_2O mixed *1-naphthalenecarboxylic acid* (I) and *1-*$C_{10}H_7CH(NH_2)CH_2CO_2H$ (II), m. 214–15°. The sepn. of the products can be accomplished either by extn. of II with dil. HCl and evapn. of the ext. or by continuous extn. of I with Et_2O for 3–4 days. The aq. ext. of the original mixt. gave some 4 g. II on addn. of Na_2CO_3. The total yield of II is 60–74%, that of I is 20–6%.

Heating 0.2 g. II, 0.6 g. $CO(NH_2)_2$, 4 ml. H_2O, and 1.5 ml. *N* HCl several hrs. on a steam bath gave after filtration, extn. with Et_2O, and acidification with concd. HCl, a small lump of tar, which was sepd. and the residual soln. after brief standing deposited 68% *1-*$C_{10}H_7CH(NHCONH_2)CH_2CO_2H$ (III); a *dihydrate*, m. 105–10° (possibly losing its uct, m. 170–1° (from EtOH). III also forms on heating soln. takes place. The *N-carbethoxy deriv.* of II, m. 178–7° (from aq. EtOH), is prepd. by treatment of II with EtO_2CCl in 2% NaOH in the cold. Treatment of II in 10% KOH with Ac_2O, followed after 0.5 hr. by acidification with 1:1 HCl is refluxed 15 min. with Ac_2O there is formed 72% Ac deriv. identical with the above and a small amt. of a substance, m. 214°, identified as *2-methyl-4-(1-naphthyl)-4H-1,3-oxazin-6(5H)-one*. Treatment of *N*-acyl derivs. of II with $SOCl_2$ at 40°, evapn. and treatment with NH_3 gave the following amides: 60.7% *1-*$C_{10}H_7CH(NHCO_2Et)CH_2CONH_2$ (IIIa), m.p. not given (from EtOH); *1-*$C_{10}H_7CH(NHAc)CH_2CONH_2$, 60%, m. 254–5° (from EtOH); *1-*$C_{10}H_7CH(NHBz)CH_2CONH_2$, 87.5%, m. 258–60° (crude), m. 270.5–7.0° (from pyridine or dioxane). If *N*-Bz derivs. of phenyl- or alkyl-δ-alanines are treated with $SOCl_2$ at 80° and the products are treated with NH_3, the products are tetrahydro-

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pyrimidines. II gave a tar under such conditions and this yielded some I amide. However when 4.2 g. of the *N*-Bz deriv. (IV) of II and 6 g. $SOCl_2$ in dry C_6H_6 were gently refluxed 4 hrs., the mixt. evapd. *in vacuo*, the residue extd. with Et_2O, and the ext. satd. with NH_3 with ice cooling, there was formed a ppt. which was washed with Et_2O and hot $CHCl_3$. The insol. residue was washed with H_2O and recrystd. from EtOH yielding 0.7 g. *1-*$C_6H_5CH(NHBz)CH_2$-*CONH*$_2$ (V), m. 277°; evapn. of Et_2O-$CHCl_3$ ext. gave 13% *2-phenyl-4-(1-naphthyl)-6-oxo-1,4,5,6-tetrahydropyrimidine*, m. 187–8° (from $CHCl_3$). A very low yield of tetrahydropyrimidine deriv. formed on heating V with BzCl and Ac_2O and no evidence of transacylation was observed. Heating *1-*$C_6H_5CH(NHAc)CH_2CONH_2$ (VI) with Ac_2O gave 80% *3-methyl-4-(1-naphthyl)-6-oxo-1,4,5,6-tetrahydropyrimidine*, m. 148–9° (from Et_2O). V (2 g.) added at −7° to 20 ml. 15% NaOH and 2.4 g. Br, stirred 2 hrs. at room temp., then heated 20 min. to 78–80° gave 0.95 g. crude product which yielded 0.22 g. pure *4-(1-naphthyl)imidazolidone* (VII), m. 221.5–2.0° (from EtOH); some BzOH was recovered. VI (2.34 g.) added at −12° to 20 ml. 15% NaOH and 3 g. Br, stirred 0.5 hr. at room temp. and warmed slowly to 50–60°, and finally to 80°, gave after cooling 1.25 g. crude, or 0.71 g. pure VII. Addn. of 0.3 g. IIIa to 5 ml. 15% NaOH and 0.15 ml. Br, shaking 2–3 hrs. at room temp. and heating to 60° gave some 0.17 g. VII. IV in abs. EtOH treated with dry HCl at 60–70° 4 hrs. then satd. with HCl at 0° gave after 24 hrs. 89.3% IV *Et ester*, m. 109–10° (from EtOH-Et_2O); this (0.7 g.) refluxed in EtOH with 4.1 ml. $N_2H_4.H_2O$ 15–20 min., dild. with more EtOH and refluxed 2 hrs., gave 96.6% IV *hydrazide*, m. 234–6° (from EtOH). VI *Et ester*, prepd. as above in 91% yield, m. 142.5–3.0° (from EtOH); this refluxed with $N_2H_4.H_2O$ in EtOH gave 92.2% VI *hydrazide*, m. 238–7° (from H_2O). The hydrazides treated at 0° in 82–8% AcOH with $NaNO_2$ gave resp. 91% IV *azide*, decomp. 53–4.5°, and 83% VI *azide*, decomp. 74–5°. The reaction with the Ac deriv. also gave in several cases a small amt. of substance, m. 205–70°, tentatively identified as *1,2-bis(N-acetyl-3-(1-naphthyl)-β-alanyl)hydrazine*. IV azide (4.7 g.) in dry C_6H_6 was refluxed 5 hrs., then evapd., yielding 70.7% *4-(1-naphthyl)-1-benzoyl-2-imidazolidone*, m. 222–4° (from EtOH). Similar treatment of VI azide gave 90% *1-acetyl-4-(1-naphthyl)-2-imidazolidone*, m. 214–16° (from EtOH and C_6H_6). The former substance was refluxed 5 hrs. with 15% NaOH yielding 53.6% VII and 78% BzOH; the VII obtained in this case, m. 219.5–21.5° (from EtOH). Similar hydrolysis of the Ac analog gave 95.8% VII, m. 221–2°.

G. M. Kosolapoff

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AUTHORS: Nazarov, I. N., Kravchenko, N. A., Klabunovskiy, Ye. I.

TITLE: Concerning the Catalytic Synthesis of Isoprene, Based on Gaseous Hydrocarbons. Communication 1. The Study of Possibility Isoprene Synthesis from Acetylene

PERIODICAL: Izvestiya Akademii nauk SSSR. Otdeleniye khimicheskikh nauk, 1959, Nr 12, pp 2171-2176 (USSR)

ABSTRACT: Several catalysts were tested for the condensation of acetylene with propylene at atmospheric pressure. Pure catalysts without support were inactive. The following supported catalysts were used. (1) $Fe_2O_3 + MoO_3/SiO_2$. Silica gel was impregnated with an aqueous solution of ammonium molybdate. The excess solution was removed. Silica gel was dried at 110° and was boiled in a 5% solution of $Fe(NO_3)_3$, for 10 minutes, dried and calcinated at 550°. The catalysts 2-7 were prepared similarly. (2) $CoO + MoO_3/SiO_2$. (3) $SnO + MoO_3/SiO_2$. (4) $TiO + MoO_3/SiO_2$.

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(5) CuO + MoO_3/SiO_2. (6) MgO + MoO_3/SiO_2. (7) CaO + + MoO_3/SiO_2. The catalysts: (8) MoO_3/ASC, (10) WO_3/ASC, (11) TiO + WO_3/ASC, (12) WO_3 + TiO/ASC were prepared with aluminum-silicate catalyst (ASC). Beside the above catalysts, (9) WO_3/SiO_2, (13) CaO/SiO_2, and ASC were also tested. Condensation of acetylene with propylene over above catalysts was carried out at 350-450° forming mostly aromatic hydrocarbons in 3.6 to 63.6% yield (benzene, toluene, o-, m-, and p-xylenes). The formation of isoprene and piperylene was not observed. A. E. Agronomov took part in this work. There are 3 tables; and 8 references, 2 German, 2 French, 3 U.S., 1 U.K., The 4 U.S. and U.K. references are: C. H. Holder, N. J. Crauford, U.S. Pat. 2388916 (13, 11, 1945). B. W. Ipatiev, H. Pines, U.S. Pat. 2410445 (25, 11, 1942).

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H. Plauson, J. A. Vielle, U.K. Pat 156116 (30, 12, 1920); Chem. Abstrs. 15, 1727 (1921).

ASSOCIATION: Zelinskiy Institute of Organic Chemistry, Academy of Sciences, USSR (Institut organicheskoy khimii imeni N. D. Zelinskogo Akademii nauk SSSR)

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